

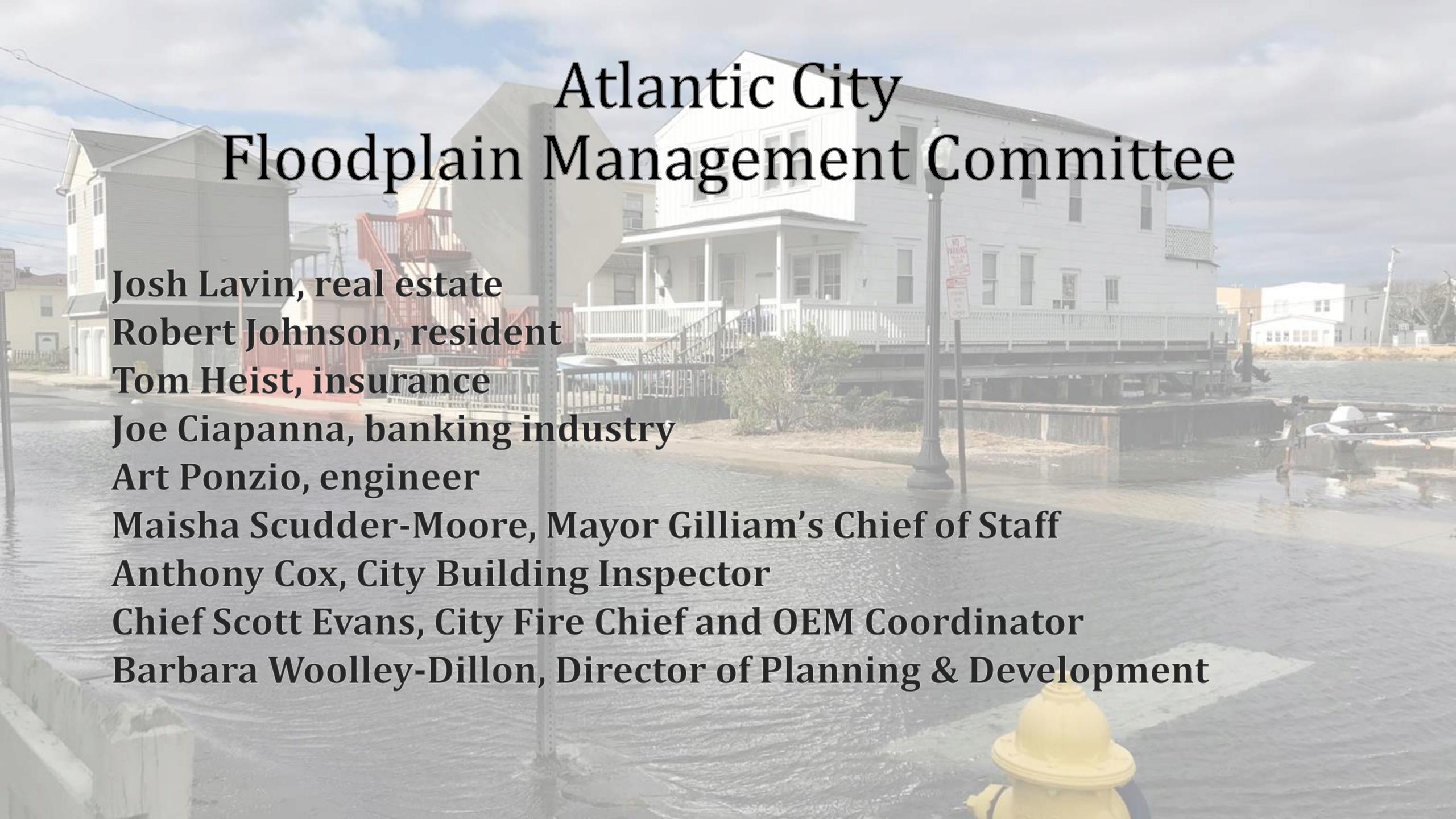
A photograph of a flooded street in Atlantic City, New Jersey. The water covers the entire street, reaching up to the bases of houses and streetlights. In the foreground, a yellow fire hydrant is partially submerged. A stop sign stands upright in the water. In the background, several houses are visible, some with porches and decks. A small boat is moored on the right side of the street.

# Atlantic City Floodplain Management Plan

**September 4, 2019**

**Rutala Associates**

# Atlantic City Floodplain Management Committee



**Josh Lavin, real estate**

**Robert Johnson, resident**

**Tom Heist, insurance**

**Joe Ciapanna, banking industry**

**Art Ponzio, engineer**

**Maisha Scudder-Moore, Mayor Gilliam's Chief of Staff**

**Anthony Cox, City Building Inspector**

**Chief Scott Evans, City Fire Chief and OEM Coordinator**

**Barbara Woolley-Dillon, Director of Planning & Development**

# Flood Management

- Flooding will continue to occur on the barrier islands
- It is not “if” flooding will occur, it is “when”
- Preparation is key – anticipate future events and prepare
  - Evacuation Plan – identify a safe place to go
  - Maintain Flood Insurance
  - Know who to call to shut off electric and gas
  - Put insurance, valuables, medicine, etc. in a safe place

# Why Develop a Floodplain Management Plan?

- 89 percent of Atlantic City's developed area is in the Special Flood Hazard Area
- The Floodplain Management Plan is unique and unlike any other plans - it specifically addresses flooding and will serve as the basis for flooding-specific improvements
- Every \$1 Invested in Disaster Mitigation Saves \$6 !
- This is not an engineering study

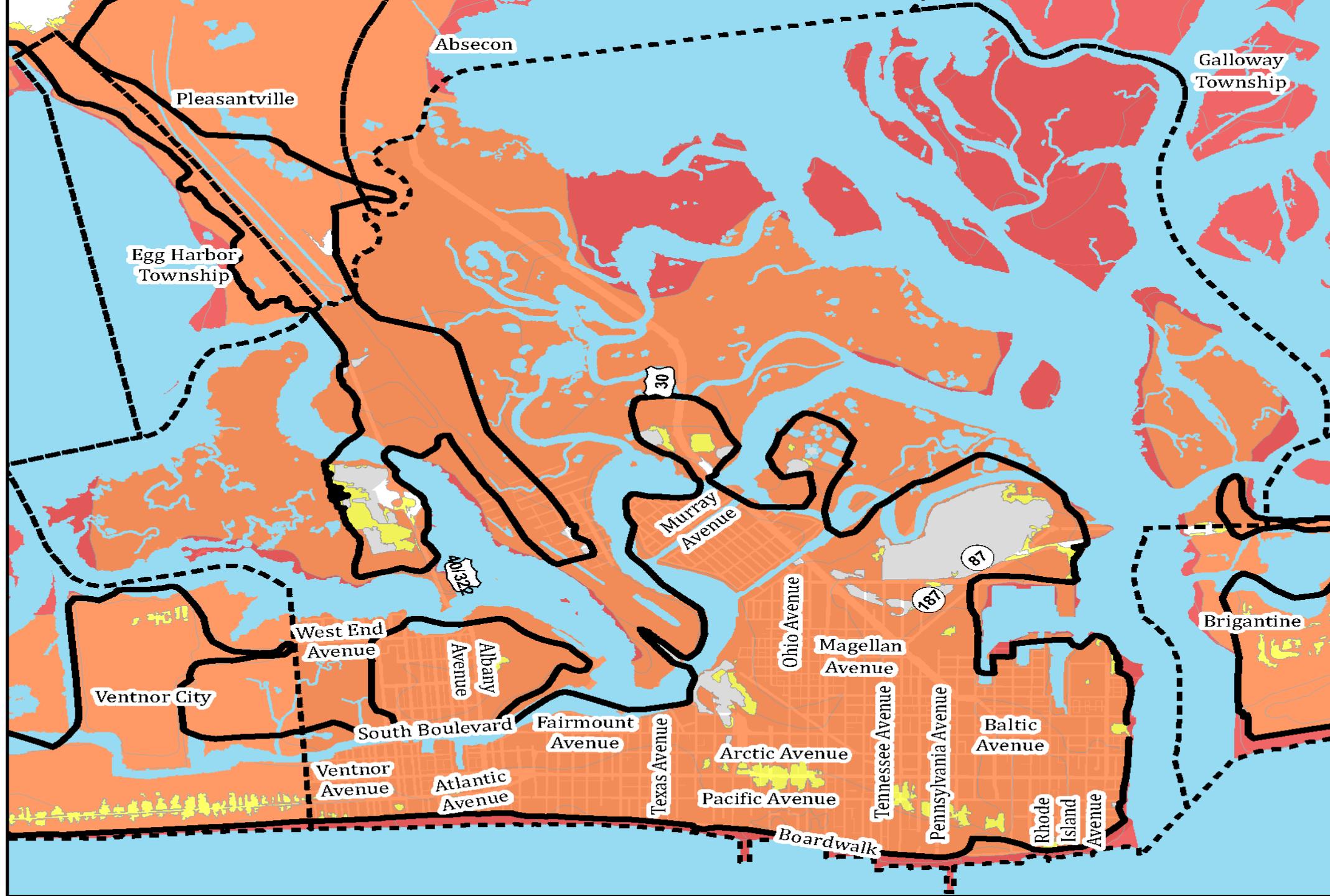
# Planning for Flooding: Why?

- Atlantic City will be one of the first communities in Atlantic County to qualify for Class 4 (30% discount)- a Floodplain Management Plan is a prerequisite
- Federal Flood Insurance

|                                  |                 |
|----------------------------------|-----------------|
| Federal flood insurance policies | 6,925           |
| Value of properties insured      | \$1,410,106,600 |
| Annual premiums                  | \$5,940,849     |
| Class 6 annual savings           | \$1,464,210     |
| Class 4 added annual savings     | \$2,192,720     |

Atlantic City

## Flood Zones (Preliminary)



Data Sources:  
FEMA, NJDEP,  
NJOIT-OGIN, USGS

Rutala Associates



# Planning 10 Step Process

1. Organize
2. Involve the public
3. Coordinate
4. Assess the hazard
5. Assess the problem
6. Set goals
7. Review possible activities
8. Draft an action plan
9. Adopt the plan
10. Implement, evaluate, revise



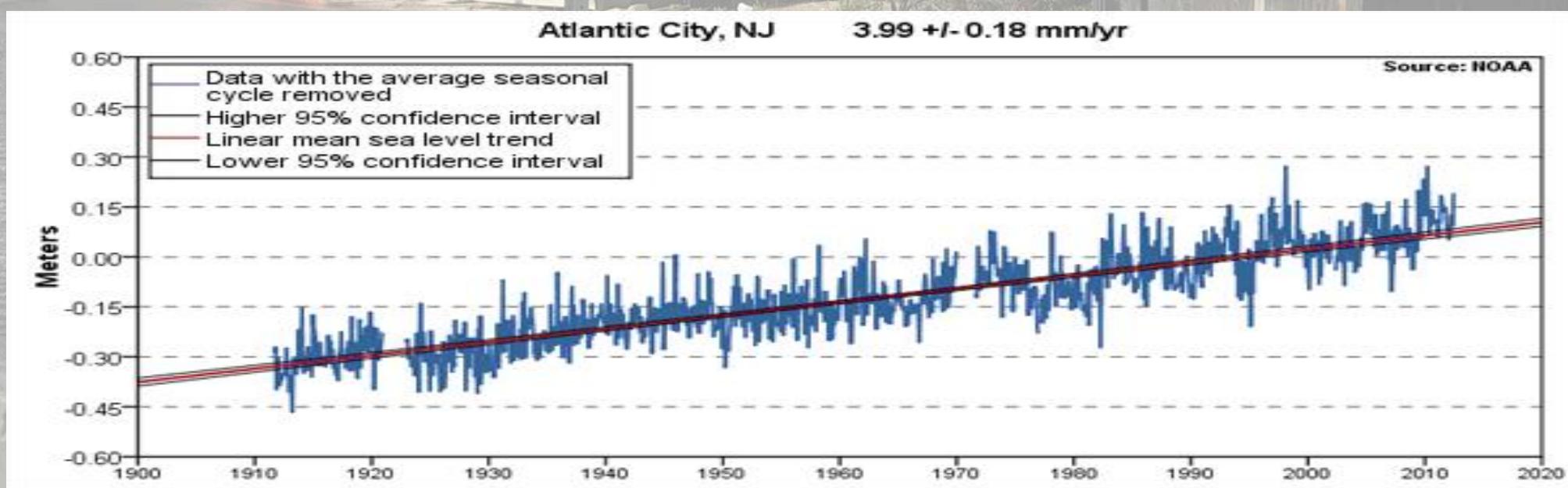
- Public outreach meeting, surveys
- Conversations and meetings with other agencies
- Plan organization and review of past plans

# Importance of Surveying

- Please complete the survey and return it at the end of this meeting so we can better understand how flooding impacts you and your property.
- Be as detailed as possible: when did you see water on your street? Do streets flood when it rains? Does your neighbor's house stay dry while yours gets wet?
- Email additional information to [atlanticcitycrs@gmail.com](mailto:atlanticcitycrs@gmail.com)

# Sea Level Rise

- Historic rate along the Jersey coast is 0.14 inches/year
- Sea level is projected to rise one foot by 2050; three feet by 2100 *assuming no changes.*



1 ft



Low-lying areas

NOA

2 ft



Venice Park Inundation

Bungalow Park Inundation

Ducktown/Chelsea  
Inundation

3 ft

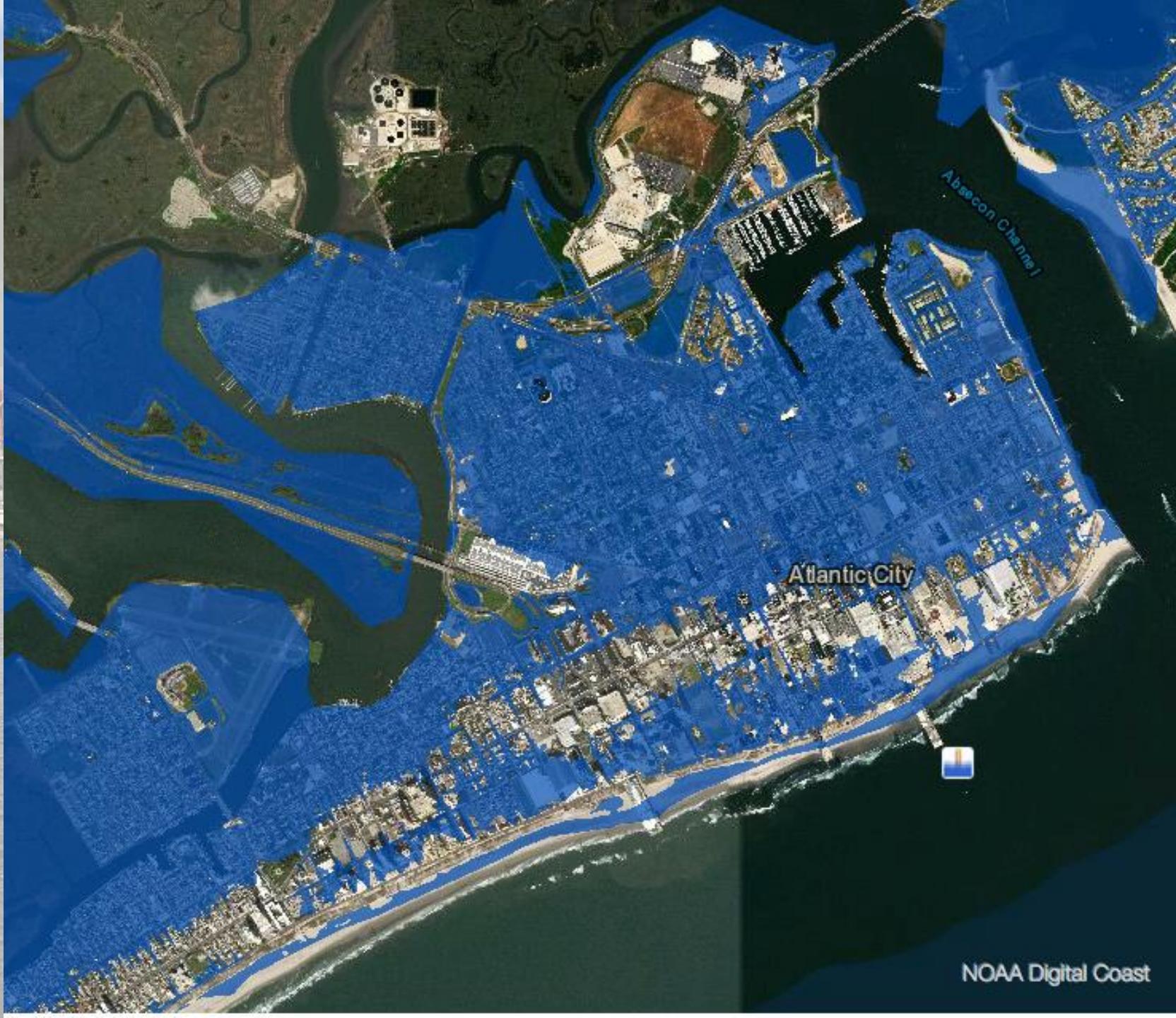


NOAA Digital





# Superstorm Sandy Surge Extent



# How is Flooding Being Addressed?

- Property owners have elevated their homes and improved bulkheads
- Atlantic City has is adding emergency generator, rebuilding the Baltic Avenue Canal, completed the Absecon Inlet Seawall, replacing bulkheads, built pump stations and has enhanced its flood ordinance
- Atlantic City Electric/South Jersey Gas are adding redundancy and floodproofing
- NJ Department of Environmental Protection is developing a Coastal Resiliency Plan and funding model
- Army Corps of Engineers have developed the draft New Jersey Back Bay Coastal Storm Risk Management Feasibility Study

# Mitigation Initiatives - Completed

- Annapolis Avenue and Fisherman's Park Flood Gates Replaced
- Absecon Inlet Seawall
- Beach replenishments
- Mansion Avenue Pump Station
- Eighty hundred homes have been elevated since 2014

# Mitigation Initiatives

## Under Construction

- Caspian's Point Bulkhead
- Massachusetts Avenue Bulkhead and Pump
- Tallahassee Avenue Bulkhead
- Emergency Generators at PAL and All Wars Building

## Being Planned/Permitted

- Lower Chelsea Public Bulkhead Replacement
- Partner with Army Corps to Replace Bulkheads in Chelsea/Ducktown
- Resilient Microgrid to Serve Midtown
- Baltic Avenue Canal Pump Stations
- Emergency Generators for Fire Houses

# Repetitive Loss Area Analysis- What it means?

- Repetitive loss area- targeted micro-study of a neighborhood that shows clusters of properties with flood damage
- If you are in a repetitive loss area, your property (or one near to you) has had two or more flood claims totaling at least \$1,000 in the past 10 years
- Designation of “repetitive loss area” does not mean your insurance will go up- it is just a planning area used by the City to pinpoint flooding causes



Prepared by Rutala Associates  
Data Source: Atlantic County, FEMA, NJOIT-OGIS

0 2,800 Feet

**Repetitive Loss Areas**

Venice Park  
Northside  
Bungalow Park  
Inlet  
Midtown North  
Midtown South  
Chelsea Beachfront  
Chelsea Bayfront  
Lower Chelsea  
Chelsea Heights  
Beach Thorofare

# Action To Take to Reduce Flooding

Venice Park - elevate bulkhead construction (2000s)

Northside - elevate

Bungalow Park - elevate, Baltic Avenue Canal System, bulkheads/seawalls

Inlet - elevate, Absecon Inlet seawall

Midtown North - elevate

Midtown South - elevate, Mansion Avenue Pump Station

Chelsea Beachfront -elevate

Chelsea Bayfront - elevate, bulkheads/seawalls

Lower Chelsea - elevate, bulkheads/seawalls

Chelsea Heights - elevate, bulkheads/seawalls

Beach Thorofare -elevate homes and Wellington Avenue, bulkhead/seawalls

# Home Elevation Funding

- FEMA Flood Mitigation Assistance: Applications available now. Applicants must have NFIP flood insurance
- FEMA grant pays 75% -- owner pays 25 %
- Atlantic City was part of successful 2016 and 2017 FMA applications
- Repetitive loss properties are a priority - Atlantic City has gone from 340 repetitive loss properties in 2014 to 260 properties today.
- Increases property value, reduces flood insurance costs

# Home Elevation Funding

*Elevating your house above Base Flood Elevations (BFEs) can reduce your flood insurance premium by 50% or more!\**



\*\$200,000 Building Coverage. Pre-FIRM AE Zone, primary residence single family structure without a basement is elevated to 1' above BFE or 3' above BFE (Rating per FEMA Flood Insurance Manual, April 1, 2017). The above illustration is based on a \$2,000 deductible with no CRS discount and not a severe repetitive loss structure.

# Next Steps

- Continue to gain public and government input.
- Complete a risk assessment – describe flooding hazards, vulnerabilities and event scenarios.
- Develop goals.
- Review activities.
- Prepare action plan.
- Public meeting to review Floodplain Management Plan
- City Council adoption.
- Implementation.

# Comments and Questions

